UNIVERSITY OF GOTHENBURG

Personality and Stance

-Investigating a method of measuring the relation between personality traits and perceived stances

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Abstract

Can personality traits affect the perception of stances? In this study, a method of connecting the perception of stances to a person's personality traits is investigated. The personality traits of 34 persons are captured and related to their perception of other persons' stances. "The Big Five Inventory" and "The 10 facet scales" are used to capture the personality profiles of the subjects and a set of 21 videos with marked targets persons is used to present different situations to them. The results showed that this method was not suitable to capture the subjects suggested stances in an adequate way and thus no connections between stance perception and personality traits could be made. Suggestions for changing the method are discussed.

Key Words Stance, Big Five Inventory, 10 facet scales, Personality trait, Communication

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Introduction

Humans are social beings that communicate. To be a social person is something attractive and good (Wilt & Revelle, 2009). Some persons are adaptation experts; they are able to fit in to almost every situation. Others are more reserved but still have a repertoire of strategies to show friendliness and cooperation. But not all persons get along. This can be due to different opinions, values, religion, culture, and so on. Also, some persons do not get along without any noticeable reason at all; they are just "not on the same wavelength".

Differences in relationships (what kind of relationship that is initiated, how successful it is, response to change) can at least partly be explained by differences in personalities among the involved persons (Hill et al, 2012; Parker et al, 2012; Srivastava & Angelo, 2009). The different personality features of a person may also affect other things; how people perceive and interpret situations in everyday life and how they communicate with each other, for example.

The idea that a personality could influence communication would perhaps come up in a context when wondering about a misunderstanding that took place or when some persons did not get along ("oh, their personalities did not work together"). But there are areas where this kind of things (personality mismatch) will have a larger effect than just a thought or some minutes of irritation. More and more digital agents are introduced. In the future, it will probably be quite normal to cooperate with a digital agent to reach a goal (order a ticket or to be guided through a museum). Some are convinced that the digital agents must be "human" in their contact with us, and not just be like a computer (Castelfranchi et al, 1998).

In the creation of social digital agents knowledge of human personality is needed. Such knowledge is necessary due to the large variety of attitudes the agent must be able to produce. It is also needed for the system to be able to interpret, and suitably respond to, the humans reaction. Allwood et al (2012) defines attitude as "complex cognitive, emotive and conative orientation toward something or somebody" and adds "often a result of an appraisal or evaluation" (p. 918). The problem with attitudes is that they are not necessarily observable. So, when wanting to talk about a noticeable attitude, the term "stance" can be used. A stance is a type of attitude that a person holds and shows when communicating.

Stance

According to Brunet (2012), stances are orientations you have towards a person you are interacting with or towards the topic that is discussed. It can also be a combination of these two. A stance can be expressed through many modes; tone of voice, body position and so on. Often it is revealed through a combination of some kind of emotions/attitudes that are expressed and behaviors. A stance can be both consciously and unconsciously expressed. A stance is not as short as an impulse, nor so long that it could be confused with a personality trait. Allwood et al (2012) suggests that 20 seconds could be a reasonable minimal limit for a stance to persist. In this thesis, the term stance will be used as an externally observable orientation directed to the topic and/or towards the persons involved in the interaction, as Brunet suggested.

A closer look at some definitions of stance (see for example Goodwin, 2007; Allwood et al, 2012 and DuBois, 2007) reveals a difference; the social feature of a stance. DuBois (2007) claims that "stance is an activity built for two (or more)" (p.171). He believes that a stance cannot take place outside a social context. Allwood (2012) does not support this social requirement; instead Allwood identifies many stances that are not of a social type, for example anger and happiness.

Chindamo et al (2012) suggest that studies of stance and stance-taking could focus on the reaction they will lead to within the interlocutor. The stance-taking reactions cannot possible be the same for all humans. There are a lot of different factors that influence what people perceive and how they process and interpret that input. A problem in studying reactions is that the aspects that affect the interpretation are hard to capture, most of them are not directly measurable (although culture and personal preferences can in some cases be highly evident).

To capture a personality

To describe and categorize personality traits became popular in the end of the 19th century and the first part of the 20th century (John & Srivastava, 1999). The variety between individuals is almost infinite (Goldberg, 1990), still there seems to be a need to divide persons into different groups. Today, there are many different sets of possible personality divisions (John & Srivastava, 1999; see also table 1) that are more or less used.

These personality categorization tests can look totally different, during some periods of time it was popular base them on pure physical measurements. The body shape reveals the personality! At least if you agreed with William Sheldon's Somatotype theory (Carter & Honeyman Heath, 1990). Today, different personality types and traits are produced with assisted introspection, such as the Big Five Inventory (Rammstedt & John,2007) where your personality traits are captured through carefully selected questions.

Big Five Inventory

The Big Five Inventory (BFI) is based on statements to which subjects respond according to how well they agree with them (self-reports). The Inventory consists of five personality dimensions. The names of each category indicate the endpoints of the dimensions. There are two different sheets to use when capturing the Big Five traits; a larger questionnaire and a smaller questionnaire (Rammstedt & John, 2007). The traditional, larger, version got its current shape in around 1980 (John & Srivastava, 1999; John et al, 2008). As the name indicates, the BFI identifies five different personality dimensions; extraversion, agreeableness, conscientiousness, neuroticism and openness to experiences (Goldberg, 1990).

Extraversion

Wilt & Revelle (2009) gives us the long history of the term that in the BFI is called extraversion. The description of a person being talkative and bold goes back thousands of years. But it was not until about 100 years ago the word extraversion was introduced by the psychologist Carl Jung (Wilt & Revelle, 2009). Extraversion (versus introversion) can be

described with different adjectives, John (1990) suggests; talkative (vs. quiet), assertive (vs. reserved), active (vs. shy) and energetic (vs. silent). Other adjectives describing this trait are; social, energetic, expressive, confident (in the HEXACO Personality Questionnaire) and also (positive) emotional (as in the Five Factor model) (Wilt & Revelle. 2009). Many different inventories use this extraversion-type of category (see table 1). The vide spread use gives an impression that extraversion is an important descriptor within many personality taxonomies.

Inventory	Abbreviation	Authors	Year
Abridged Big Five Circumplex	AB5C	Hofstee, De Raad, & Goldberg	1992
Big Five Markers	BFM	Goldberg	1992
Big Five Inventory	BFI	John, Donahue, & Kentle	1991
Big 5 Aspect Scales	BFAS	DeYoung, Quilty, & Peterson	2007
Eysenck Personality Inventory	EPI	H. J. Eysenck & S. B. Eysenck	1968
Eysenck Personality Questionnaire	EPQ	S. B. Eysenck & H. J. Eysenck	1975
Eysenck Personality Profiler	EPP	Eysenck & Wilson	1991
Five-Factor Nonverbal Personality Questionnaire	FF-NPQ	Paunonen & Ashton	2002
Guilford–Zimmerman Temperament Study	GZTS	Guilford & Zimmerman	1949
HEXACO Personality Inventory	HEXACO-PI	Lee & Ashton	2004
International Personality Item Pool	IPIP	Goldberg	1999
Maudsley Personality Questionnaire	MPQ	Eysenck	1959
Multidimensional Personality Questionnaire	MPQ	Tellegen	1982
NEO Personality Inventory—Revised	NEO PI-R	Costa & McCrae	1992b
NEO Five-Factor Inventory	NEO FFI	Costa & McCrae	1992b
Riverside Behavioral Q-Sort	RBQ	Funder, Furr, & Colvin	2000

Table 1: From Wilt & Revelle (2009), page 31. The table describes different inventories that measure extraversion.

Agreeableness

According to Barrick & Mount (1991), high scores on the agreeableness scale tend to correlate with persons being friendly, flexible and tolerant. They "tend to engage in more teamwork" and "are more cooperative" (LePine & van Dyne p327). Other capabilities related to this trait include altruism, trust and modesty (John, 2008; Barrick & Mount, 1991). Is it possible to separate a flexible and friendly person from a sociable? The line between agreeableness and extraversion is fuzzy, as John et al (2008) highlights. The need for both extraversion and agreeableness is due to historical reasons, and also to capture the modesty and tenderness that extraversion lack.

Neuroticism

Neuroticism captures the tension and nervousness part of a person's personality. Neuroticism contrasts emotional stability and an even temperament with anxiousness. This leads for example to negative reactions towards illness, where a neurotic person won't be successful in handling sorrow and other stressful situations (John et al, 2008). The German psychologist

Hans Eysenck described this dimension as emotional stability (neuroticism could be seen as another expressions for the lack of emotional stability), and it was included in his "Big Two" system together with Extraversion (Barrick & Mount, 1991).

Conscientiousness

The next trait, conscientiousness, in the Big Five Inventory describes a person's thoughtfulness and ability to predict situations and plan his/her behavior. Terms like control and constraints are connected with the trait. (John et al, 2008). A typical person with high scores on conscientiousness would be listening to advice for example on health and therefore would exercise the daily half hour and take the train instead of a car.

Openness (to experience)

This category includes traits such as intelligence and originality, and is thus connected with learning and willingness to participate in new situations (Barrick & Mount, 1999). According to John et al (2008) the adventurous side of a person is also connected with this trait.

Ten facet scales

The ten facet scales are a variant of the BFI. Instead of five personality dimensions, the ten facet scales consist of ten traits: Assertiveness, Activity (connected with Extraversion); Altruism, Compliance (Agreeableness); Order, Self-Discipline (Consciousness), Anxiety, Depression (Neuroticism); Aesthetics and Ideas (and these two are connected with Openness). This variant came up in an attempt to specify personality traits; the categories of BFI are very broad and there is a risk for interesting information being lost (John & Soto, 2009).

Aim

The aim of this thesis is to investigate a study design suggested by Paul Brunet (2012). Is the test battery suitable to answer questions of personality traits and its effect on stance perception? A study is performed according to the instructions and the research question within this method is "Do personality traits affect which stance that is perceived?". Are there for example differences between what a social and outgoing person perceives versus a more reserved person, or is personality not affecting the perceptual part of communication?

Research Question

Is the test battery suggested by Paul Brunet suitable to answer questions of personality traits and its effect on stance perception?

Method

The test battery suggested by Brunet consists of three parts. The first part consists of subjects identifying and suggesting stances. The subjects watched a playlist of 21 short videos and they were asked to suggest 1-3 stances that a certain target person in the videos is expressing. In the second part of the test, the participants fill in a personality test (BFI). In the last part, the subjects fill in demographic information, such as nationality. All material, including instructions and consensus sheet are included in Appendix A-E.

Participants

34 students participated in the study, age span 19-35 years, mean 23.4 years and median 22.5 years. 16 were females (47 %, age span 19-29 years, mean age 22.4 years and median 21 years) and 18 were males (53 %, age span 19-35 years, mean age 24.2 years and median 24 years). All participants were native Swedish speaking university students, and were offered two cinema tickets to participate in the study. They all got anonymous codes.

Procedure

The participants were welcomed and shown into a room equipped with computers and headphones. The subjects were allowed to sit wherever they liked. All rooms that were used had more prepared seats than the number of participants. The subjects were given an information sheet (Appendix B) and a few minutes to read it through. The same information was also given verbally in Swedish and the participants could ask questions and discussed, among themselves, what a stance was. No examples of stances were mentioned by the test leader. The subjects were told that they could ask questions any time during the test. After the reading, a consensus form was distributed and signed. The groups were small, 1-8 persons at a time.

The first part of the session consisted of watching 21 videos, 30-60 seconds long and suggesting stances. There were two different playlist consisting of the same videos but in reversed order; the first video in Playlist 1 was the last in Playlist 2. The computers with the different playlists were placed so that no neighboring computer had the same playlist. The participants were given a response sheet (see Appendix E) and were asked to fill in 1-3 stances that they thought a specific person (the target person) in the movie had. They were also asked to fill in how clearly the target persons displayed the given stance. The participants were also given the possibility to clarify or explain the stance they had given.

The second part of the session consisted of a 44-item self-reporting personal test; the Big Five Inventory (see Appendix C). The subjects were also given a sheet where they filled in additional information about age, gender, language knowledge and nationality/ethnicity (see Appendix D).

Calculation of the BFI scores

John et al (2008) describes how to calculate the BFI scores. The inventory consists of 44 claims that the participants rate from 1 to 5 (where the participants are asked to write 1 if they

strongly disagree and 5 if they strongly agree with the claim). Each claim is connected to a personality trait. Extraversion is for example connected to claims 1, 6, 11, 16, 21, 26, 31 and 36 (see the list below).

Extraversion: 1, 6r, 11, 16, 21r, 26, 31r, 36
Agreeableness: 2r, 7, 12r, 17, 22, 27r, 32, 37r, 42
Conscientiousness: 3, 8r, 13, 18r, 23r, 28, 33, 38, 43r
Neuroticism: 4, 9r, 14, 19, 24r, 29, 34r, 39
Openness: 5, 10, 15, 20, 25, 30, 35r, 40, 41r, 44

To calculate the scores for each category the subjects' ratings are added to each other. Some of the answers have to be reversed. This strategy is used to avoid extreme responding (the relevant claims are denoted with an "r" in the list above). Extreme responding is a tendency some persons have; they tend to prefer answering with the extreme endpoints. The BFI are handling this bias with claims that later on are being reversed. Claim 6 ("I am someone who is reserved") belongs, after reversing, to extraversion. The mean of the sum is the traits final score. See the example below to see how the calculations are performed.

Step (1) Look at the answers
Extraversion: Claim 1: ***2*** p, claim 6r: ***4*** p, claim 11: ***3*** p, claim 16: ***1*** p, claim 21r: ***5*** p, claim 26: ***2*** p, claim 31r: ***5*** p and claim 36: ***2*** p.

Step (2) Reverse some of the answers
Extraversion: Claim 1: *2* p, claim 6: **2** p, claim 11: *3* p, claim 16: *1* p, claim 21: **1** p, claim 26: *2* p, claim 31: **1** p and claim 36: *2* p.

Step (3) Add the answers
2 + 2 + 3 + 1 + 1 + 2 + 1 + 2 = 14

Step (4) Calculate the mean

14/ 8 = 2

Score on extraversion = 2

Calculation of the 10 facet scale scores

These scales are not included in the original version of the test battery but can give a more nuanced description of a personality. The calculation of the 10 facet scale scores follows the same principle as for the BFI. The same response sheet is used and the same questions are reversed. The procedure of adding and calculating mean is the same as for the BFI. The claims connected to each trait are described in John & Soto (2009) as follows:

Assertiveness: 1, 6r, 21r, 26, 31r
Activity: 11, 16
Altruism: 7, 22, 27r, 32

Compliance: 2r, 12r, 17
Order: 8r, 18r
Self-discipline: 13, 23r, 28, 38, 43r
Anxiety: 9r, 19, 34r, 39
Depression: 4, 29
Aesthetics: 30, 41r, 44
Ideas: 10, 15, 25, 35r, 40

Figure 1: Snapshots from the set of videos.

Reliability

Both Cornbach's Alpha and Split-Half Correlation can be used to estimate internal consistency of a test and is represented by a number between 1 and 0 (Tavakol & Dennick, 2011; Reynaldo & Santos, 1999). Internal consistency is the correlation between similar answers within a test. A subject is not allowed to agree with "I love sweets" and "I have always liked chocolate and desserts" and "I hate candy" for example. That would lead to low internal consistency. But if the subject agrees with the first two claims and disagrees with the third that would instead indicate that the test has a high internal consistency.

For comparing groups, a value of 0.7-0.8 is regarded as satisfactory; that corresponds to a level of 70% - 80 %, and thus accepted as reliable enough in this type of personality research

(Tavakol & Dennick, 2011). There is no huge difference between these two reliability measurements; Split-Half Correlation which treats the measurements as two separate set of tests and compares these to each other and Cornbach's Alpha is a kind of averaging of all the possible Split-Half settings within a test (Trochim, 2006).

Videos

Almost half of the 21 videos were clips from television talk-shows (12 of 21). One of the videos consisted of a debate from the news, one from a courtroom and the rest were different forms of documentary-like interviews. Some of them had a quite humorous approach and others had a more neural or serious approach. The topics in the videos varied from dealing with infidelity, unwanted pregnancy, disturbing youngsters to questions about the meaning of life, but also lighter subjects such as the best way of taking a certain grip during workout.

Possible groups with different personality traits

Groups of subjects with similar personality traits means were created. All combinations (for example high scores on assertiveness or low scores on extraversion in combination with a high score on neuroticism) in the material formed a group. A limit of at least 3 participants in each group was set; otherwise the groups would have been too many. This was done manually by looking at the scores of each of the participants. The Microsoft program Excel was used to count mean values and keep track of data.

Suggested stances

The suggested stances were grouped together in two ways so that it would be easier to compare them. Glad (Swedish *glad*) and happy (Swedish *lycklig*) were for example together forming a group "glad". To limit the different stances even more, the suggested stances were also grouped based on semantic similarity. This led to larger groups; for example "positive emotions" that would consist of stances such as *happy*, *playful*, *open* and *amused*.

Result

Internal reliability

The internal reliability in the 44-item BFI, measured by Cornbach's Alpha, varied from 0.55 (Openness) to 0.85 (Neuroticism). According to George and Mallery (2005), and their "rule of thumb" when handling alpha, the internal reliability should be over 0.7 to be used (p. 369). Three of the dimensions showed a satisfactory reliability (>0.70). The useful traits were Extraversion (0.84), Agreeableness (0.79) and Neuroticism (0.85). Conscientiousness and Openness had low internal reliability (0.68 and 0.55 respectively), as shown in table1. The Split-Half Correlation is also presented in this table; one can see that it follows the same pattern as the Cornbach's Alpha value. Therefore only Cornbach's alpha was used for the ten facet scales. The alpha value for the ten facet scales are to be found in table 2. The useful traits in this case are Assertiveness (0.76), Activity (0.71), Altruism (0.74), Anxiety (0.76) and Aesthetics (0.76).

	α	C	α	C	α	C	α	C	α	C
Extraversion	**0.84**	**0.84**								
Agreeableness			**0.79**	**0.76**						
Conscientiousness					0.68	0.54				
Neuroticism							**0.85**	**0.82**		
Openness									0.55	0.41

Table 2: The five dimension's Cronbach's Alpha, α, and Split-Half Correlations, C.

	α	α	α	α	α	α	α	α	α	α
Assertiveness	**0.76**									
Activity		**0.71**								
Altruism			**0.74**							
Compliance				0.40						
Order					0.37					
Self-discipline						0.53				
Anxiety							**0.76**			
Depression								0.67		
Aesthetics									**0.76**	
Ideas										0.34

Table 3: The ten facet scale's Cronbach's Alpha, α.

Responses on the BFI and the 10 facet scale

The participant's responses on the three used BFI traits (extraversion, agreeableness and neuroticism) are presented in table 4 and table 5. The two traits that did not live up to the reliability requirements are not used further in the study.

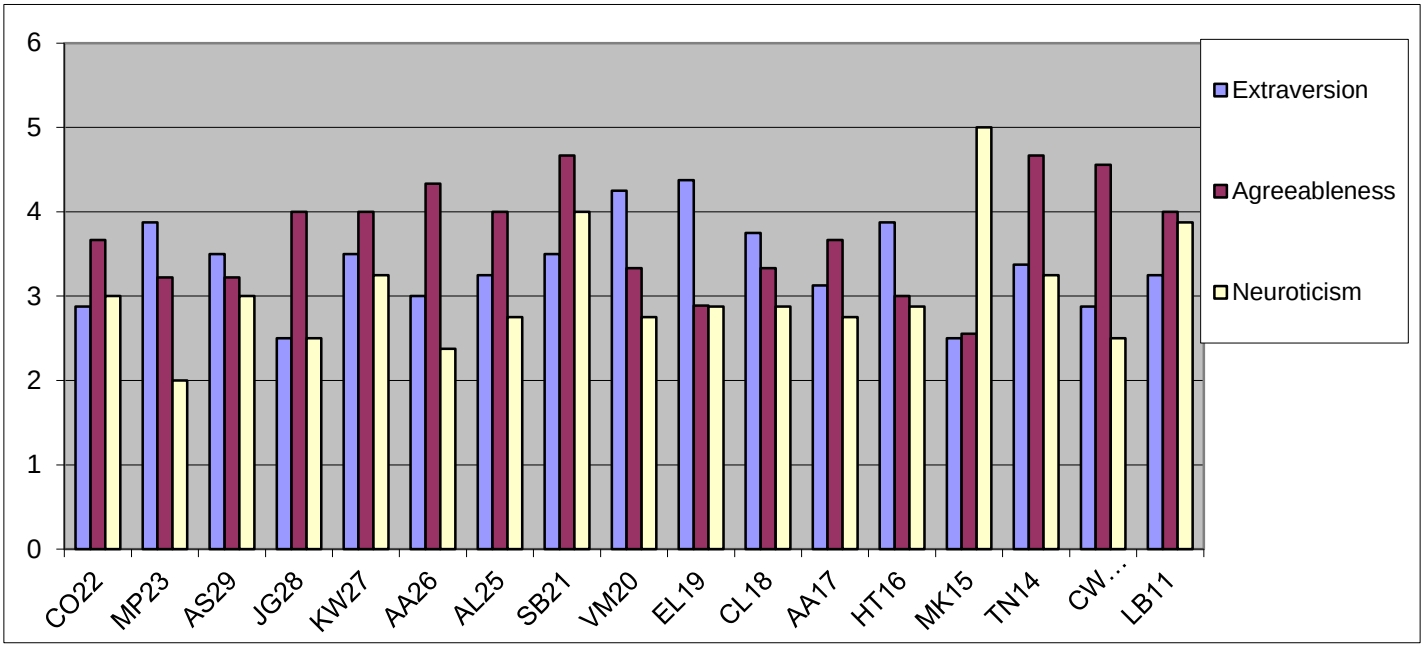

Table 4: Participants mean values on Extraversion, Agreeableness and Neuroticism. 17 of 34 participant's personality profiles on the Big Five Inventory are presented. On the X-axis the participant's anonymous codes are shown.

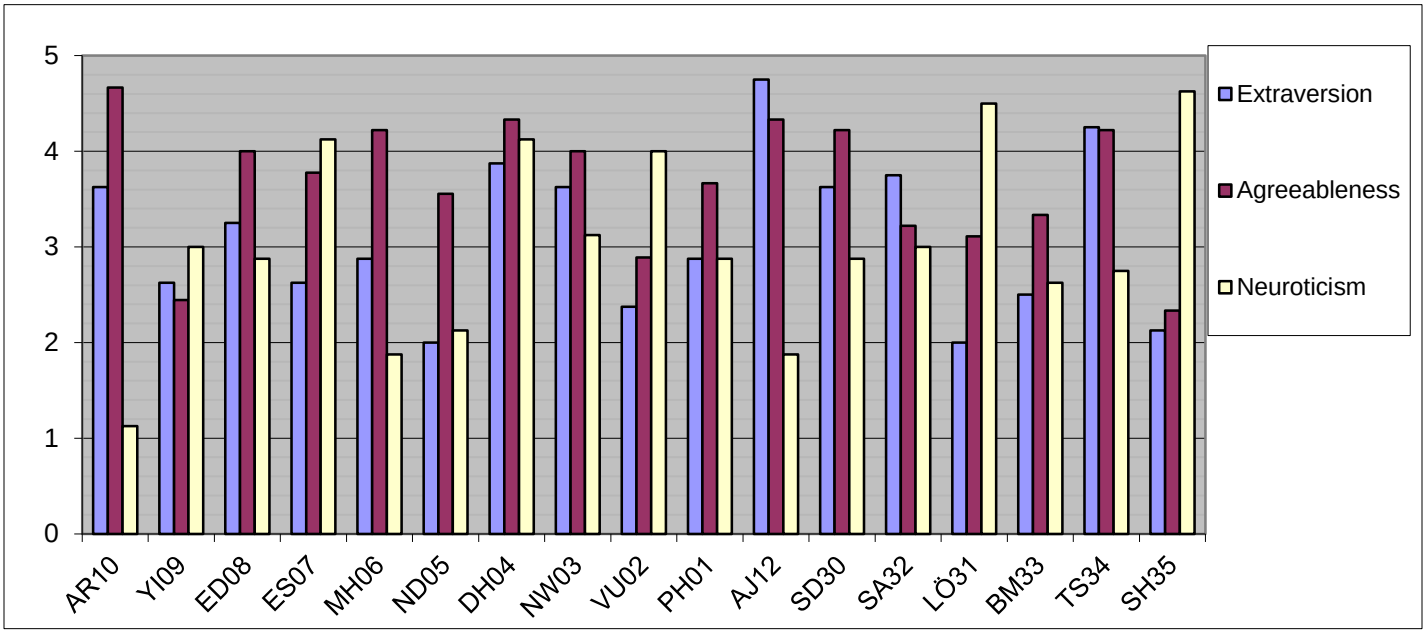

Table 5: Participants mean values on Extraversion, Agreeableness and Neuroticism. 17 of 34 participant's personality profiles on the Big Five Inventory are presented. On the X-axis the participant's anonymous codes are shown.

The participant's responses on five categories from the ten facet scales are presented in table 6, 7 and 8.

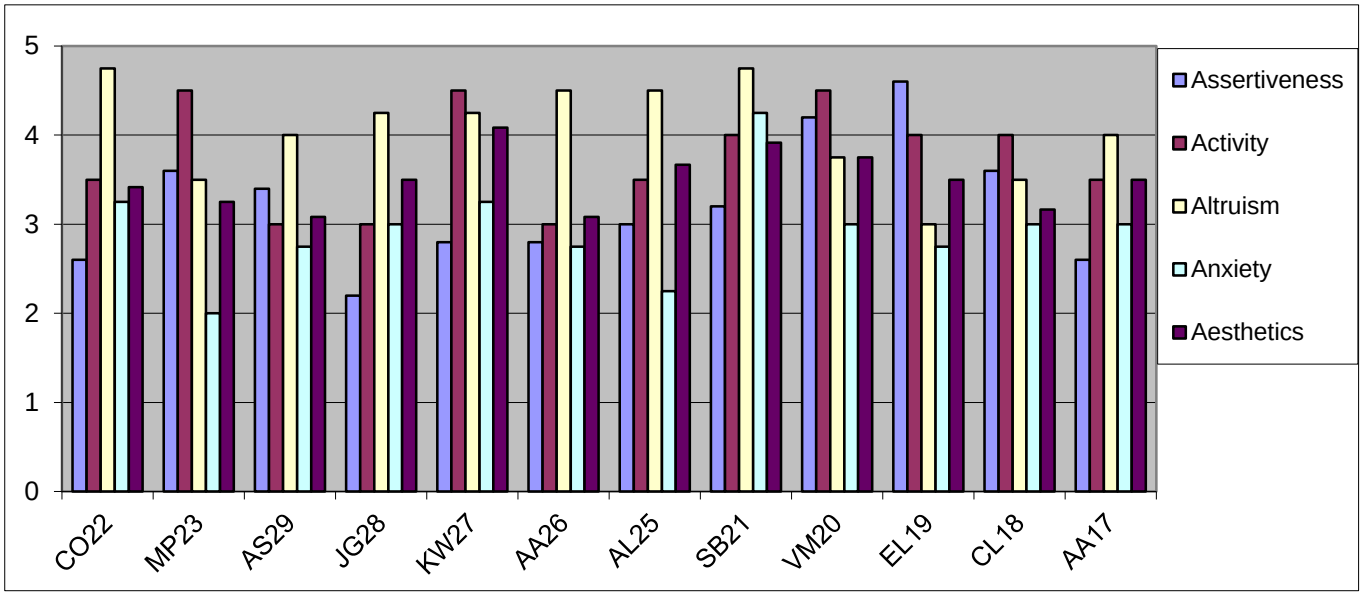

Table 6: 12 of 34 participant's mean values on five of the traits of the ten facet scales: Assertiveness, Activity, Altruism, Anxiety and Aesthetics. On the X-axis the participant's anonymous codes are shown.

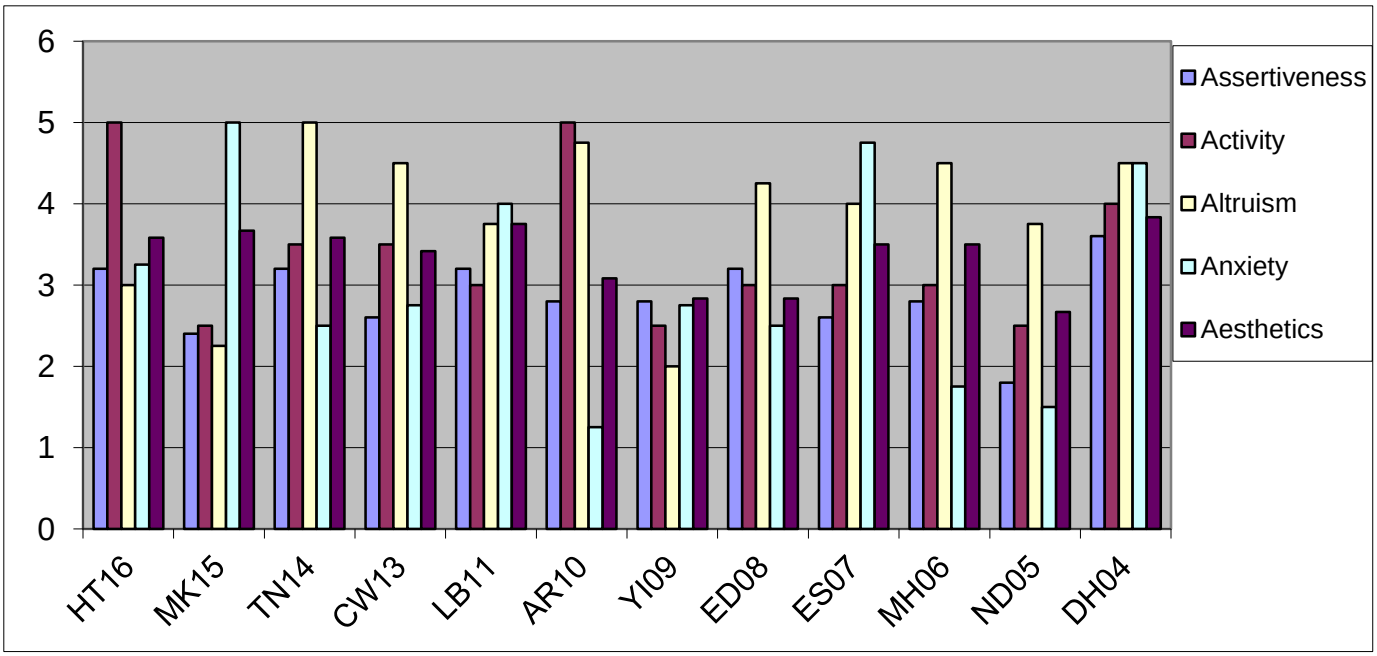

Table 7: 12 of 34 participant's mean values on five of the traits of the ten facet scales: Assertiveness, Activity, Altruism, Anxiety and Aesthetics

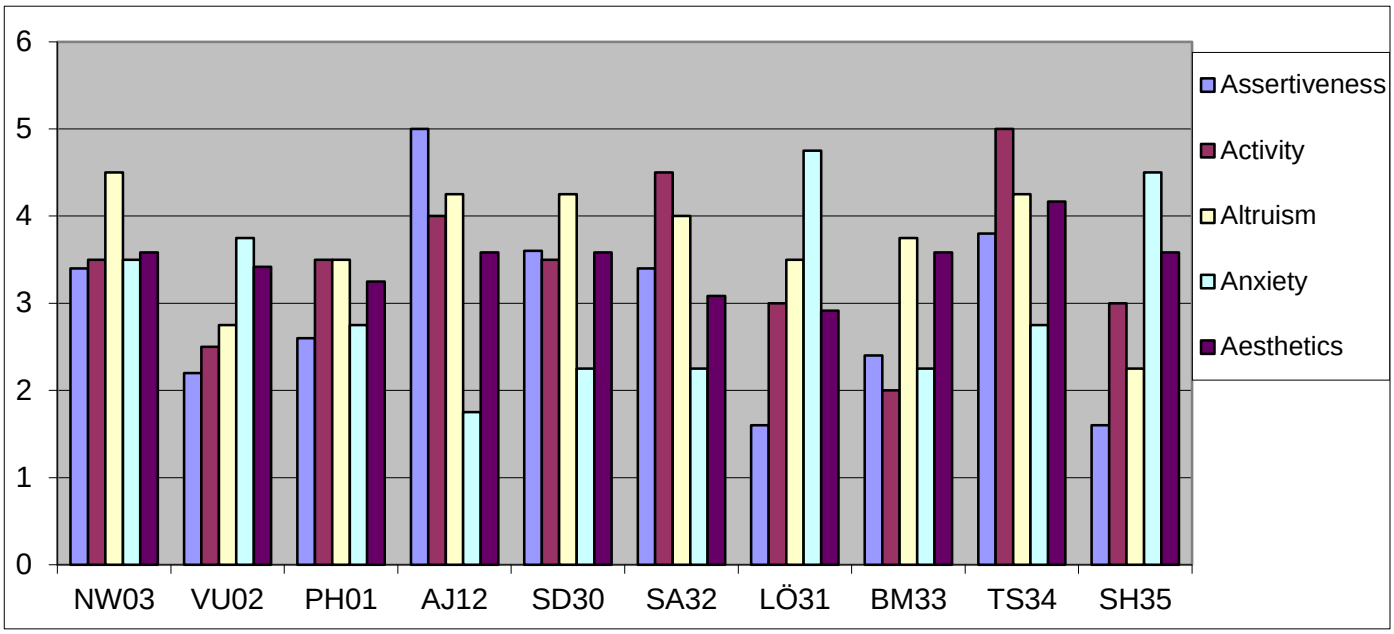

Table 8: 10 of 34 participant's mean values on five of the tent traits of the ten facet scales: Assertiveness, Activity, Altruism, Anxiety and Aesthetics. On the X-axis the participant's anonymous codes are shown.

Groups based on personality traits

Individual personality profiles for both the BFI dimensions and the facet scales had been created. The task was now to find groups based on these personality profiles. Not only extreme group traits, also reoccurring patterns of personality traits were interesting. A manual examination was done to see what traits and combinations that exist in this setting. From this examination 13 groups were found, see the list below.

1) **Aesthetic and Activity group**; includes subjects that have the same, or very similar, mean value on aesthetic and activity traits (a group of 15)
2) **Extraversion and Neuroticism group**; includes subjects that have the same, or very similar, mean value on extraversion and neuroticism traits (a group of 6)
3) **Extraversion and Agreeableness group**; includes subjects that have the same mean value on extraversion and agreeableness traits (a group of 5)
4) **Low Anxiety group**; includes subjects that have low* mean value on anxiety trait (a group of 5)
5) **Low Neuroticism group**; includes subjects that have low* mean value on neuroticism trait (a group of 4)
6) **Low Assertiveness group**; includes subjects that have low* mean value on assertiveness traits (a group of 3)
7) **Low Neuroticism and high Agreeableness group**; includes subjects that have low** mean value on neuroticism and high** mean value on agreeableness (a group of 5)
8) **Low Anxiety and High Altruism group**; includes subjects that have low** mean value on

anxiety and high** mean value on altruism (a group of 6)
9) **High Agreeableness group**; includes subjects that have high* mean value on agreeableness trait (a group of 3)
10) **High Altruism group**; includes subjects that have high mean value* on altruism trait(a group of 3)
11)**High Neuroticism group**; includes subjects that have high mean value* on neuroticism trait (a group of 7)
12) **Low variation BFI group**; includes subjects that have low variation*** between their mean values of the traits included in the BFI dimensions (a group of 14)
13) **Low variation 10 group**; subjects that have low variation*** between their mean values of the traits 10 facet scales (a group of 6)

* in comparison with the group mean, a factor of 1 over/under the group mean
**mean values differs with a factor of 2
***all traits within a factor 1

Suggested stance and the selection of videos

Overall, the suggested stances were quite similar over a majority of the 21 videos. The suggested stances in four of the videos were of a different character. These videos and stances are presented in table 9. Similar suggested stances (like glad and happy) were grouped together. The number of occurrences of each perceived stance is marked with parentheses (x). Stances were also grouped together based on semantic similarity (see table 10).

The four videos were placed in the middle of both the playlists. Two of the videos (13-51i and 16-63i) received very inconsistent stance interpretations (see table 9). The other two videos (8-029b and 10-31i) had combinations of interpretations that were interesting. The number of suggested stances is not equal in the tables. Some subjects identified three stances, whereas others just perceived one or two.

A short description of the videos

V8-029b: The video captures a talk show; the theme is whether money can buy love. A woman sits in front of the audience and speaks about what happened when she won money in a lottery. The woman tells the audience what she did before (watching a talk show and drank some wine) and how she changed channel and got all numbers correct on the lottery.
10-31i: A girl comes out from a cabin. She talks about what insects she saw in that cabin and that she does not like snakes at all. She also speaks about her own reaction she got when she saw the snake.
13-51i: Two men are practicing material arts and joking about how some grips hurts.
16-63i: Two persons, a man and a woman, are doing something by a river. At the same time, they are interviewed and talk about how a decision affects their life, and about a voting situation. In the end the cameraman says something ironic about being a girl in this situation, the woman laughs.

video	8-029b	10-31i	13-51i	16-63i
Stances	calm (19), glad (14), nostalgic (4), satisfied (3), shy (3), nervous (3), proud (2), open (2), dominant (2), confident (1), derogatory (1), uncomprehending (1), naïve (1), humble (1), humoristic (1),surprised (1), neutral (1), honest (1), caring (1).	shocked (12), glad (10), relieved (9), scared (8), exited (8), open (2), calm (2), stressed (2), uncomfortable (1), overwhelmed (2), dramatic (1), nervous (1), upset (1), sad (1), proud (1), honest (1), self-distant (1), tired (1), disgusted (1), discomfort (1), emotional (1).	glad (9), playful (7), humoristic (3), insecure (3), comfortable (3), embarrassed (2), shy (2), amused (2), focused (2), unserious (2), relaxed (2), unfocused (2), understanding (1), worried (1), safe (1), scared (1), kind (2), affronted (1), uninterested (1) , open (1), arrogant (1), informative (1), nervous (1), attentive (1), engaged (1), closeness (1), easygoing (1), careful (1), reserved (1), irritated (1), distrusting (1), concentrated (1), curious (1), teasing (1).	insecure (5), disappointed (5), submissive (4), glad (4), calm (3), tired/resignation (3), distressed (3), frustrated (3), irritated (2), accusing (2), sad (2), trivialize (2), kind (1), confused (1), defending (1), easygoing (1), determined (1), exited (1), imaginative (1), in love (1), critical (1), thoughtful (1), manipulative (1), moody (1), passive (1), shy (1), careful (1), upset (1), comfortable (1), curious (1).

Table 9: Suggested stances, translated into English, in four of the 21 videos.

video	8-029b	10-31i	13-51i	16-63i
Stances	Calm/caring (6), Positive emotions (5), Negative emotions (4), Mixed emotions (3),Dominant (2)	High energy (6), Positive emotions (7), Negative emotions (6), Distant (2)	Positive emotions (13), Insecure (8), Certain (7) Negative emotions (6)	Positive emotions (11), Negative emotions (7), Insecure (6), Certain (4), Passive (2)

Table 10: Suggested stances divided into larger fields.

Personality trait groups compared with suggested stances

The stances of the four videos (8-029, 10-31i, 13-51i and 16-63i) are compared with the 13 personality traits groups that were found. The number of occurrences of each stance within each group is marked with parentheses (x). Nostalgic (4) means for example that four persons

have suggested the stance *nostalgic*. Most of the times, a subject has provided more than one stance. The suggested stances are also divided into larger fields containing stances with similar energy level or similar feelings. Negative emotions (6) means that six of the suggested stances are thought of as negative (*scared, uncomfortable, nervous, upset, disguised, discomfort*). See p.28 for an example of how different stances within a video can occur.

The four videos are now compared with both the suggested stances and the stances divided into larger fields.

Video 8- 029i

This video captures a talk show; the theme is whether money can buy love.

Aesthetic and Activity group

8 different stances were suggested within this group of 15: calm (8), glad (5), nervous (1), neutral (1), humoristic (1), surprised (1), and dominant (1), derogatory (1).

Stances from all suggested fields were suggested: Dominant (2), Calm/caring (2), Positive emotions (2), Mixed Emotions (1), Negative emotions (1).

Extraversion and Neuroticism group

4 different stances were suggested within this group of 6: glad (4), naïve (1), shy (1), dominant (1), and calm (1).

Stances from all different fields were suggested: Positive emotions (1), Mixed emotions (1), Negative emotions (1), Dominant emotions (1) and Calm (1).

Extraversion and Agreeableness group

8 different stances were suggested within this group of 5: glad (2), satisfied (2), nostalgic (1), calm (1), open (1), nervous (1), confident (1), and proud (1).

Stances from 3 different fields were suggested: Positive emotions (4), Calm (3), Negative emotions (1).

Low Anxiety group

7 different stances were suggested within this group of 5: glad (2), nervous (1), calm (2), shy (1), honest (1), caring (1), and neutral (1).

Stances from 4 different fields were suggested: Calm (4), Positive emotions (1), Mixed emotions (1), Negative emotions (1).

Low Neuroticism group

6 different stances were suggested within this group of 4: honest (1), caring (1), glad (2), nervous (1), calm (2) and shy (1).

Stances from 3 different fields were suggested: Calm (3), Negative emotions (2), Positive emotions (1).

Low Assertiveness group
4 different stances were suggested within this group of 3: calm (2), dominant (1), satisfied (1), and proud (1).

Stances from 3 different fields were suggested: Calm (2), Dominant (1), Positive emotions (1).

Low Neuroticism and High Agreeableness group
5 different stances were suggested within this group of 5: calm (3), glad (3), surprised (1), nervous (1), and shy (1).

Stances from 3 different fields were suggested: Negative emotions (2), Mixed emotions (1), Positive emotions (1), Calm (1).

Low Anxiety and High Altruism group
4 different stances were suggested within this group of 6: calm (3), glad (2), nervous (2) and shy (1).

Stances from 3 different fields were suggested: Negative emotions (2), Calm (1), Positive emotions (1).

High Agreeableness group
5 different stances were suggested within this group of 5: calm (3), glad (3), surprised (1), nervous (1), and shy (1).

Stances from 4 different fields were suggested: Negative emotions (2), Mixed emotions (1), Positive emotions (1), Calm (1).

High Altruism group
2 different stances were suggested within this group of 3: glad (2) and calm (1).

Stances from 2 different fields were suggested: Positive emotions (1), Calm (1).

High Neuroticism group
6 different stances were suggested within this group of 7: calm (6), glad (1), proud (1), open (1), dominant (1), shy (1).

Stances from 4 different fields were suggested: Positive emotions (3), Calm (1), Dominant (1), Negative emotions (1).

Low variation BFI group
12 different stances were suggested within this group of 14: calm (6), glad (5), nostalgic (3), shy (1), nervous (1), open (1), dominant (1), confident (1), derogatory (1), satisfied (1), uncomprehending (1), and naïve (1).

Stances from 5 different fields were suggested: Calm (3), Negative emotions (3) Positive emotions (3), Mixed emotions (2), Dominant (1).

Low variation 10 group
8 different stances were suggested within this group of 6: nostalgic (1), shy (1), nervous (1), glad (1), confident (1), calm (2), dominant (1), and derogatory (1).

Stances from 4 different fields were suggested: Calm (2), Negative emotions (2), Positive emotions (2), Dominant (2).

Video 10-31i
A girl talks about what insects she saw in a cabin and tells that she does not like snakes at all.

Aesthetic and Activity group
11 different stances were suggested within this group of 15: relieved (6), shocked (4), scared (4), exited (3), glad (3), sad (1), upset (1), kind (1), honest (1), calm (1), and overwhelmed (1).

Stances from 3 different fields were suggested: Positive emotions (5), High Energy (3), Negative emotion (3).

Extraversion and Neuroticism group
4 different stances were suggested within this group of 6: shocked (3), glad (3), scared (2), and calm (1).

Stances from 3 different fields were suggested: Positive emotion (2), High Energy (1), Negative emotion (1).

Extraversion and Agreeableness group
9 different stances were suggested within this group of 5: open (2), glad (2), self-distant (1), calm (1), exited (2), tired (1), emotional (1), shocked (1), and discomfort (1).

Stances from 4 different fields were suggested: Positive emotions (4), High Energy (2), Distance (2), Negative emotions (1).

Low Anxiety group
8 different stances were suggested within this group of 5: shocked (3), relieved (2), exited (1), scared (1), disgusted (1), glad (1), honest (1), and stressed (1).

Stances from 3 different fields were suggested: Negative emotions (3), High Energy (2), Positive emotions (3).

Low Neuroticism group
8 different stances were suggested within this group of 4: shocked (3), relieved (2), exited (1), overwhelmed (1), scared (1), disgusted (1), glad (1) and stressed (1).

Stances from 3 different fields were suggested: High energy (3), Negative emotions (3), Positive emotions (2).

Low Assertiveness group
6 different stances were suggested within this group of 3: glad (3), scared (2), calm (1), relieved (1), exited (1), open (1).

Stances from 3 different fields were suggested: Positive emotions (4), High Energy (1), Negative emotions (1).

Low Neuroticism and High Agreeableness group
9 different stances were suggested within this group of 5: relieved (2), scared (2), disgusted (1), shocked (2), glad (1), exited (1), kind (1), calm (1), and stressed (1).

Stances from 3 different fields were suggested: Positive emotions (4), Negative emotions (3), High energy (1).

Low Anxiety and High Altruism group
8 different stances were suggested within this group of 6: shocked (3), relieve (3), scared (2), glad (2), excited (1), disgusted (1), honest (1) and stressed (1).

Stances from 3 different fields were suggested: Negative emotions (4), Positive emotions (3), High Energy (2).

High Agreeableness group
5 different stances were suggested within this group of 3: shocked (2), relieved (2), glad (1), disgusted (1), and scared (1).

Stances from 3 different fields were suggested: Positive emotions (2), Negative emotions (2), High Energy (1).

High Altruism group
4 different stances were suggested within this group of 3: shocked (3), scared (2), relieved (2), and disgusted (1).

Stances from 3 different fields were suggested: Negative emotions (2), High Energy (1), Positive emotions (1).

High Neuroticism group
7 different stances were suggested within this group of 7: glad (5), relieved (4), open (2), shocked (2), scared (3), self-distant (1), and exited (1).

Stances from x different fields were suggested: Positive emotions (3), Negative emotions (2), High Energy (1), Distant (1).

Low variation BFI group
14 different stances were suggested within this group of 14: shocked (6), scared (4), glad (3), relieved (2), calm (2), uncomfortable (1), stressed (1), exited (1), overwhelmed (1), dramatic (1), nervous (1), upset (1), and sad (1).

Stances from 3 different fields were suggested: Negative emotions (7), High energy (4), Positive emotions (3).

Low variation 10 group
10 different stances were suggested within this group of 6: glad (2), uncomfortable (1), stressed (1), shocked (1), calm (2), exited (1), scared (1), overwhelmed (1), and dramatic (1).

Stances from 3 different fields were suggested: High energy (4), Negative emotions (3), Positive emotions (2).

Video 13-51i
Two men are practicing material arts in this video.

Aesthetic and Activity group
19 different stances were suggested within this group of 15: glad (5), playful (2), unfocused (2), insecure (2), shy (1), kind (1), open (1), silly (1), unserious (1), engaged (1), arrogant (1), informative (1), closeness (1), humoristic (1), distrusting (1), comfortable (1), confident (1), careful (1), and embarrassed (1), affronted (1).

Stances from 4 different fields were suggested: Positive emotions (10), Insecure (6), Certain (2), Negative emotions (2).

Extraversion and Neuroticism group
7 different stances were suggested within this group of 6: unserious (1), amused (1), relaxed (1), glad (2), focused (1), playful (1), and insecure (1).

Stances from 4 different semantic fields were suggested: Positive emotions (4), Insecure (2), Certain (1).

Extraversion and Agreeableness
7 different stances were suggested within this group of 5: kind (2), open (1), playful (2), understanding (1), worried (1), glad (2), and concentrated (1).

Stances from 3 different semantic fields were suggested: Positive emotions (5), Insecure (1), Certain (1).

Low Anxiety group
7 different stances were suggested within this group of 5: playful (2), curious (1), teasing (1), comfortable (1), distrusting (1), nervous (1) and glad (1).

Stances from 3 different semantic fields were suggested: Positive emotions (5), Insecure (1), Negative emotions (1).

Low Neuroticism group

6 different stances were suggested within this group of 4: playful (1), curious (1), teasing (1), comfortable (1), nervous (1) and glad (1).

Stances from 2 different semantic fields were suggested: Positive emotions (5), Insecure (1).

Low Assertiveness group

3 different stances were suggested within this group of 3: playful (2), glad (2), and embarrassed (1).

Stances from 2 different semantic fields were suggested: Positive emotions (2), Insecure (1).

Low Neuroticism and High Agreeableness group

6 different stances were suggested within this group of 5: silly (1), unserious (1), glad (2), teasing (1), comfortable (1), and nervous (1).

Stances from 2 different semantic fields were suggested: Positive emotions (4), Insecure (2).

Low Anxiety and High Altruism group

5 different stances were suggested within this group of 3: glad (1), arrogant (1), closeness (1), unsecure (1), and teasing (1).

Stances from 3 different semantic fields were suggested: Positive emotions (3), Insecure (1), Negative emotions (1).

High Agreeableness group

4 different stances were suggested within this group of 3: shy (1), glad (1), arrogant (1), and teasing (1).

Stances from 3 different semantic fields were suggested: Positive emotions (2), Insecure (1), Negative emotions (1).

High Altruism group

4 different stances were suggested by this group of 3: teasing (1), shy (1), glad (1), and arrogant (1).

Stances from 3 different semantic fields were suggested: Positive emotions (2), insecure (1), Negative emotions (1).

High Neuroticism group

7 different stances were suggested by this group of 7: glad (4), playful (3), arrogant (1), relaxed (1), humoristic (1), safe (1) and embarrassed (1).

Stances from 2 different semantic fields were suggested: Positive emotions (6), Negative emotions (1).

Low variation BFI group
18 different stances were suggested within this group of 14: glad (5), shy (2), amused (1), focused (1), understanding (1), worried (1), playful (1), comfortable (1), safe (1), embarrassed (1), affronted (1), insecure (1), uninterested (1), kind (1), open (1), relaxed (1), arrogant (1) and informative (1).

Stances from 4 different semantic fields were suggested: Positive emotions (8), Insecure (5), Negative emotions (3), Certain (2).

Low variation 10 group
11 different stances were suggested within this group of 6: shy (1), amused (1), glad (2), focused (1), understanding (1), worried (1), playful (1), comfortable (1), safe (1), embarrassed (1), and affronted (1).

Stances from 4 different semantic fields were suggested: Positive emotions (5), Insecure (3), Negative emotions (1), Certain (2).

Video 16-63i
In this video, two persons are standing beside a river and are interviewed about how a decision affects their life.

Aesthetic and Activity group
17 different stances were suggested within this group of 15: glad (3), frustrated (3), calm (3), accusing (2), distressed (2), submission (2), easygoing (1), disappointed (1), determined (1), exited (1), sad (2), imaginative (1), kind (1), confused (1), defending (1), in love (1) and shy (1), trivialized (1).

Stances from 4 different semantic fields were suggested: Positive emotions (8), Negative emotions (6), Insecure (2), Certain (2).

Extraversion and Neuroticism group
5 different stances were suggested within this group of 6: disappointed (1), tired/resignation (1), irritated (1), imaginative (1) and insecure (2).

Stances from x different semantic fields were suggested: Negative emotions (2), Positive emotions (1), Insecure (1), Passive (1).

Extraversion and Agreeableness group
5 different stances were suggested within this group of 5: defending (1), confused (1), disappointed (2), insecure (1) and upset (1).

Stances from 2 different semantic fields were suggested: Negative emotions (3), Insecure (2)

Low Anxiety group
8 different stances were suggested within this group of 5: insecure (2), moody (1), disappointed (1), comfortable (1), curious (1), accusing (1), submission (2), and careful (1).

Stances from 3 different semantic fields were suggested: Negative emotions (3), Positive emotions (3), Insecure (2).

Low Neuroticism group
7 different stances were suggested within this group of 4: insecure (2), moody (1), disappointed (1), comfortable (1), curious (1), careful (1), and submissive (1).

Stances from 3 different semantic fields were suggested: Positive emotions (3), Negative emotions (2), Insecure (2).

Low Assertiveness group
4 different stances were suggested within this group of 3: imaginative (1), submissive (1), shy (1) and upset (1).

Stances from 3 different semantic fields were suggested: Insecure (2), Negative emotions (1), Positive emotions (1).

Low Neuroticism and High Agreeableness group
9 different stances were suggested within this group of 5: frustrated (1), calm (1), sad (1), glad (1), disappointed (1), comfortable (1), curious (1), insecure (1), and submissive (1).

Stances from 3 different semantic fields were suggested: Positive emotions (4), Negative emotions (3), Insecure (2).

Low Anxiety and High Altruism group
4 different stances were suggested within this group of 3: disappointed (2), determined (1), glad (1) and distressed (1).

Stances from 3 different semantic fields were suggested: Negative emotions (2), Positive emotions (1), Certain (1).

High Agreeableness group
4 different stances were suggested within this group of 3: frustrated (1), kind (1), disappointed (2), and determined (1).

Stances from 3 different semantic fields were suggested: Negative emotions (2), Positive emotions (1), Certain (1).

High Altruism group
4 different stances were suggested within this group of 3: disappointed (2), frustrated (1), certain (1), kind (1).

Stances from 3 different semantic fields were suggested: Negative emotions (2), Certain (1), Positive emotions (1).

High Neuroticism group
11 different stances were suggested within this group of 7: disappointed (2), insecure (2), comfortable (1), calm (1), imaginative (1), shy (1), passive (1), easygoing (1), distressed (1), determined (1), tired/resignation (1).

Stances from 5 different semantic fields were suggested: Positive emotions (4), Negative emotions (2), Insecure (2), Passive (2), Certain (1).

Low variation BFI group
20 different stances were suggested within this group of 14: critical (1), tired/resignation (1), irritated (2), disappointed (2), imaginative (1), in love (1), sad (1), trivialization (1), insecure (2), thoughtful (1), frustrated (1), kind (1), moody (1), manipulative (1), defending (1), confused (1), determined (1), calm (1), glad (1), and excited (1).

Stances from 6 different semantic fields were suggested: Negative emotions (7), Positive emotions (6), Certain (4), Insecure (2), Passive (1).

Low variation 10 group
8 different stances were suggested within this group of 6: critical (1), tired/resignation (1), irritated (1), disappointed (1), imaginative (1), in love (1), sad (1), and trivialization (1).

Stances from x different semantic fields were suggested: Negative emotions (4), Positive emotions (2), Certain (1), Passive (1).

Analysis

Three of the five BFI categories were used in this study. These were extraversion, agreeableness and neuroticism. The other two dimensions were not used because their internal reliability was too low (0.68 and 0.55 respectively). In addition, five scales of the ten facet scales had an alpha value over 0.7 and were also included. These were assertiveness, activity, altruism, anxiety and aesthetic. John & Soto (2009) motivated their development of the ten facet scale with an increased sensitiveness, because the five BFI dimensions could be insensitive and sometimes too broad. The use of the facet scales leads to inclusion of one aspect of openness, aesthetics, within this thesis.

The mean values of each personality trait were used to construct groups. Altogether, many different groups would have been possible to construct, with 5 possible levels on each of the 3 (extraversion, agreeableness and neuroticism) and 5 (assertiveness, activity, altruism, anxiety and aesthetics) different traits. In this study, 13 groups with different personality traits, or combination of traits, stood out from the majority. They could, for example, have extreme mean values of certain traits.These groups were used to see if the traits, or combinations of traits, affected the stances that the subjects perceived and reported.

Suggested stances and personality trait groups

No coherent results were found among the answers and groups in the first video (8-029b). At a first glance, the *aesthetic and activity group* could be a possible candidate further investigation. The stance *glad* was suggested by five subjects and *calm* by eight. But when comparing with the total amount of stances, were *calm* got 19 suggestions and *glad* 14, it can be realized that it is not significant. So the *aesthetic and activity group* did not answer differently that the total amount of subjects.

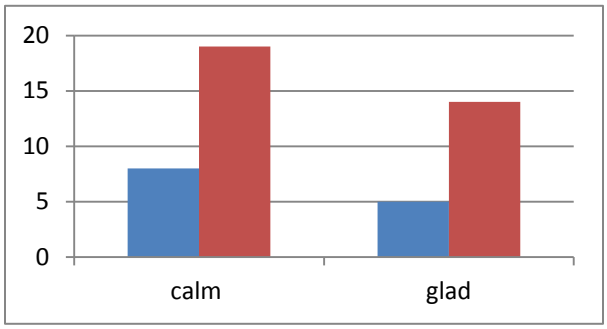

Table 11: Comparison between the aesthetic and activity group and the total amount of the suggested stances calm and glad

Members in the *Low variation BFI group* had also an interesting feature; the stance *nostalgic* was suggested 3 times. This stance was suggested 4 times in total. But this is not enough evidence to say anything about the group's perception. When looking at for example the stance *glad* in the same group, it was suggested 5 times which is a third of the total amount of suggested *glad*s. This group's participants are about a third of the total amount of subjects in the study, so it is a totally normal result.

When looking at the suggested stances for second video (10-31i) nothing remarkable came up at a first glance. In the video, a girl talked about her very recent meetings with creepy animals, and many of the participants captured both that the girl was glad that it was over and also the stress she showed when talking about the event. Some individual participants captured only

one part of his (for example with the stances *shocked* or *relieve*). But none of the groups captured the majority of stances from both side. How is this possible? Figure 2 reveals some answers to that.

The first thing that happens after the girl comes out from the cabin is that she gets some fruits from an old man. This makes the girl (and also the viewer) very confused. You don't get the answer of why the fruits are given to her. Shortly after that she turns around and the interview starts. She is affected by what just happened in the cabin, but laughs. At this happy/shocking moment, where she laughs and tells what she feels about the creepy animals inside, she also shakes her head and makes a face at the memory (and looks very uncomfortable).

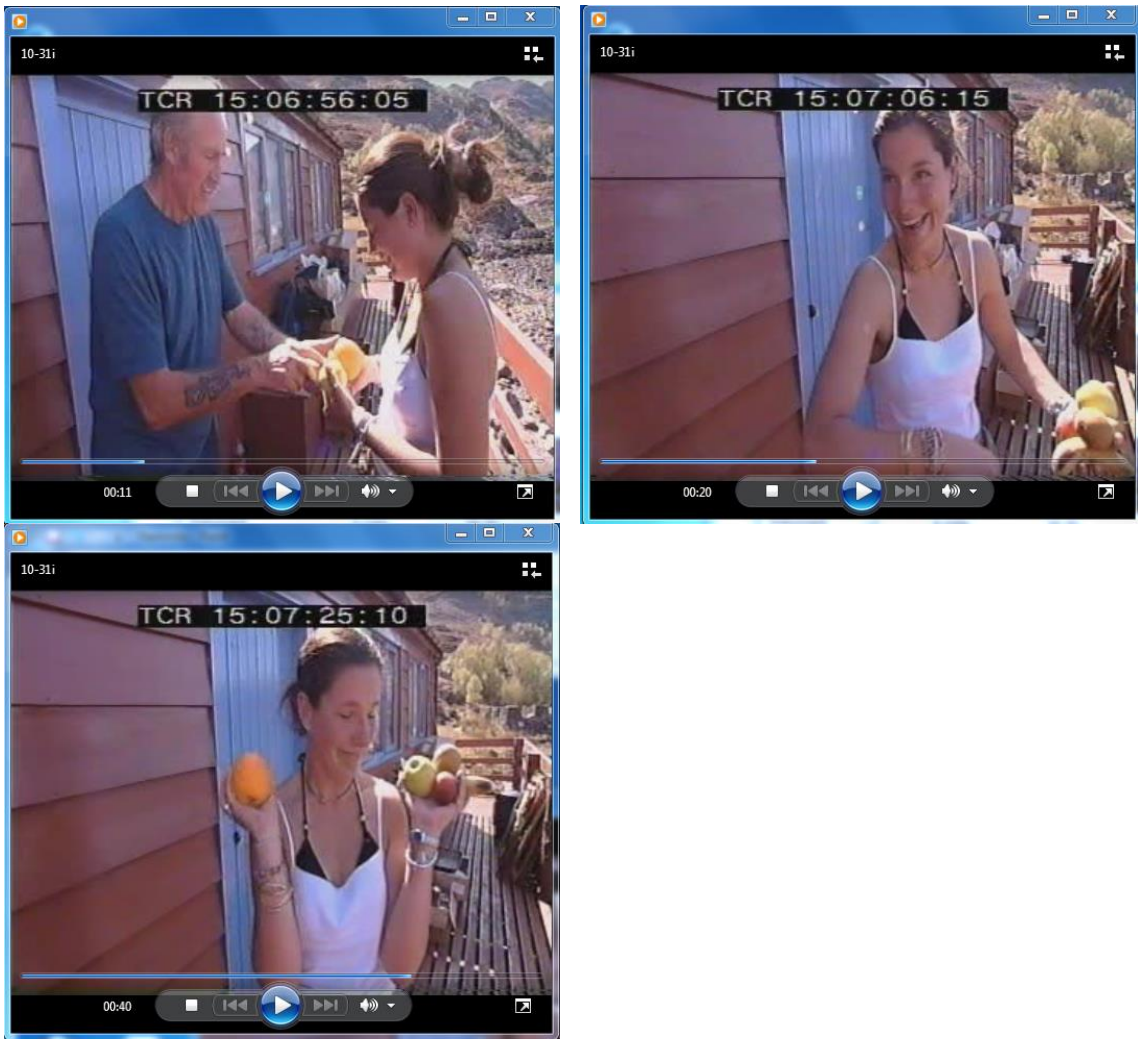

Figure 2: Three snapshots from the video 10-31i. The first thing that happens after the girl comes out from the cabin is that she gets some fruits. After that she laughs and tells about what happened in the cabin. This happy moment is mixed with her shaking her head and making face.

As presented in the results part, the participants within the *aesthetic and activity group* suggested the following stances for this video:
Relieved, shocked, scared, exited, glad, sad, upset, kind, honest, calm, overwhelmed.

With the set of snapshots above these stances, the mix might not be as surprising as they first occurred to be.

The suggested stances in the next two videos (13-51i and 16-63i) follow the same unclear pattern. The results within the larger group constellations showed no consensus at all (nor did most of the minor groups) where the suggested stances were all from *informative* or *shy* to *arrogant*. Two groups, *low assertiveness and low neuroticism and high agreeableness*, captured stances that were somewhat similar; *playful, glad* and *embarrassed* and *silly/ unserious, glad, teasing, comfortable* and *nervous* respectively. But when comparing the results with the rest of the group, they are not surprising or different in any way.

The video 16-63i had a fairly consistent answering repertoire, with stances such as *irritated, accusing* and *insecure*. But there were also a few stances such as *glad*, *easygoing* and *curious* within these somewhat negative suggestions. None of the constructed groups were able to capture and isolate these positive stances. Also in this case some snapshots from the video can reveal the secret of this mixture, see figure 3. The two shots are very close in time. The subject under discussion is sensitive, but the interviewer and the interviewee seem to have good contact and jokes.

Figure 3: One of two persons in the video 16-63i. The girl is talking about a serious issue, and the effect on her life, shortly after she laughs at something humorous about it.

The most probable reason for the inconsistency in the suggested stances (and thus making them not comparable) seems to be connected to the content of the videos and not to the subjects‘ personality profiles. The idea that different personality types see and interpret things differently, as other researchers have noticed in their studies (for example Hill et al, 2012; Parker et al, 2012; Srivastava & Angelo, 2009; Barrick & Mount, 1999), seems not to be true in all situations. None of the groups, where the members had similar personality profiles, showed consistency in their perception of stances, instead the context in the videos seemed be more important.

Discussion

The aim of this thesis was to try out a test battery suggested by Brunet (2012). The aim was to see if this method was suitable to answer the question of personality traits and their effect on stance perception. The results showed that this method was not suitable. This could be because the method is wrongly constructed, or that the research question is wrong, or both.

The variety of suggested stances does in my mind depend much on the setting. The videos were long and included several possible stances to be revealed. There were no marking of a specific stance that the subjects could describe. The subjects could also suggest three possible stances but there was no control if the three stances appeared in one specific situation or in three different places in the video. A better way to control this insecurity would be to stop and/or mark the specific stance of interest.

There is no support in this study that the personality traits captured by the Big Five Inventory and/or the ten facet scales affect perception of expressed attitudes. These personality tests are seen as dimensions, where you don't have a fixed position, but can move during lifetime. If the suggestion that traits affect how one perceives attitudes is true, then this ability also would change at the same time as the trait evolves. This could lead to strange situations where people who were able to recognize very subtle expressions of emotions after some time just would recognize very clear expressions. Also, the measurement of traits within five or ten dimensions is very broad when an unlimited number of personality profiles exist. With these critical comments in mind, we note that other studies using BFI are successful on predicting for example job performance (Barrick & Mount, 1999) or academic performance (O'Connor & Paunonen, 2007) so it can obviously be a useful tool.

Conclusion

The thesis investigated a method aimed to use when investigating if patterns of personality traits could decide or affect what stances you perceive. The method was not able to capture the data needed to find this out. The method should be changed, especially the way of collecting stances. As it is now, the suggested stances cannot be tracead and there is no way of knowing what stances the subjects perceive. There is both the possibility that the subjects perceive the same stance differently, and that they just perceive different stances.

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Brunet, P. 2012. The definition of stance is written in the description of a participant response sheet of the Belfast Stance Study. The Belfast Stance Study is an international study started 2012, and this thesis is a part of it. The study is thought to be implemented in several European countries and this is the reason for all material being in English, and also the reason for the requirement of the subjects having Swedish as their mother tongue.

APPENDIX A

Protocol

1) Participant arrives
2) Participant is given information sheet and verbal information about the study
3) Participant signs consent form
4) Participant is put in front of a computer with headphones and given their response sheet (corresponding to the assigned playlist)
5) Folder should already be open on the computer containing the video clips from one of the playlist (note: both playlists have the same video clips, just in a different order).
6) After watching and labelling each clip, participant is given a demographic questionnaire and Big five inventory (I'm collecting that in QUB, you don't have to include the Big five if you don't want to. If you do want to, let me know because it's available in Swedish and in Dutch, and I can get it for you).

NOTE:

Participants are tested individually (group testing would introduce too many confounds).

Participants must be able to understand English given that's the language spoken in the clips.

Participants are to give labels in their mother tongue (English, Swedish, or Dutch depending on location of testing).

There are two playlists (reversed order). Give playlist 1 to half of the participants, and playlist 2 to the other half.

APPENDIX B

PARTICIPANT INFORMATION SHEET

Identifying Stances

When people communicate, they often adopt 'stances' – that is, they settle into a particular orientation to the person they are interacting with, or the topic under discussion, or both, and express it through their tone of voice, body position, and so on. Stances typically bring together several components – an attitude that is being expressed, behaviours that express it, a degree of emotion (but under control), and conscious intentions to communicate in a particular way. They are not as long lasting as a personality trait or as fleeting as a surge of emotion, and they are usually meant to be recognised, rather than welling up spontaneously.

In today's experiment you will be viewing and labelling 21 video clips. In each clip, you will be asked to label the 'stance' of the target person. There are lots of everyday terms that describe states that belong in that general category, but we are not giving examples because the point of the study is to see which of the terms people find it natural to use, and how well they agree which applies when.

Each clip is between 30 to 60 seconds long, only watch each clip once. On your response sheet, the target person is identified. Please only label the stance of the target person. For each clip, you have the option of providing 3 stance labels if you think there is more than one sensible answer.

-Please provide a minimum of 1 stance label.

-For each stance label you are given space to provide a clarification (this is optional).

-For each stance label you provide, we ask that you rate it on a scale of 1 to 5 as to how clear of an example the clip is of that particular stance.

Once you have completed all 21 clips, you will be asked to complete a demographic questionnaire and a personality questionnaire. You are asked to answer the questions truthfully. Your name will not be attached with your completed questionnaires. An ID number will link your questionnaire data with your response sheet. Anonymity and confidentiality will be maintained. Your name will only appear on your consent form, which will be kept separately from the rest of the data.

The session should last no longer than 45 minutes. Your participation is entirely voluntary and you are free to withdraw at any time without having to provide any further explanation. If you decide to withdraw from the experiment, any data or information you have provided will be erased.

Feel free to ask any questions you may have about the study. After the session the experimenter will explain the study in more detail and you can ask any remaining questions then.

Your participation is warmly appreciated. Thank you for your time.

Dr. Paul Brunet: p.brunet@qub.ac.uk, Professor Roddy Cowie: r.cowie@qub.ac.uk

APPENDIX C

How I am in general

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1 Disagree Strongly	**2** Disagree a little	**3** Neither agree nor disagree	**4** Agree a little	**5** Agree strongly

I am someone who…

1. _____ Is talkative
2. _____ Tends to find fault with others
3. _____ Does a thorough job
4. _____ Is depressed, blue
5. _____ Is original, comes up with new ideas
6. _____ Is reserved
7. _____ Is helpful and unselfish with others
8. _____ Can be somewhat careless
9. _____ Is relaxed, handles stress well.
10. _____ Is curious about many different things
11. _____ Is full of energy
12. _____ Starts quarrels with others
13. _____ Is a reliable worker
14. _____ Can be tense
15. _____ Is ingenious, a deep thinker
16. _____ Generates a lot of enthusiasm
17. _____ Has a forgiving nature
18. _____ Tends to be disorganized
19. _____ Worries a lot
20. _____ Has an active imagination
21. _____ Tends to be quiet
22. _____ Is generally trusting
23. _____ Tends to be lazy
24. _____ Is emotionally stable, not easily upset
25. _____ Is inventive
26. _____ Has an assertive personality
27. _____ Can be cold and aloof
28. _____ Perseveres until the task is finished
29. _____ Can be moody
30. _____ Values artistic, aesthetic experiences
31. _____ Is sometimes shy, inhibited
32. _____ Is considerate and kind to almost everyone
33. _____ Does things efficiently
34. _____ Remains calm in tense situations
35. _____ Prefers work that is routine
36. _____ Is outgoing, sociable
37. _____ Is sometimes rude to others
38. _____ Makes plans and follows through with them
39. _____ Gets nervous easily
40. _____ Likes to reflect, play with ideas
41. _____ Has few artistic interests
42. _____ Likes to cooperate with others
43. _____ Is easily distracted
44. _____ Is sophisticated in art, music, or literature

APPENDIX D

Demographic Questions:

Date of Birth (day, month, year): _____

Sex: ☐ Male
☐ Female

Nationality: _____

Ethnicity: _____

First language: _____

Other spoken languages: _____

APPENDIX E

PARTICIPANT RESPONSE SHEET

When people communicate, they often adopt 'stances' – that is, they settle into a particular orientation to the person they are interacting with, or the topic under discussion, or both, and express it through their tone of voice, body position, and so on. Stances typically bring together several components – an attitude that is being expressed, behaviours that express it, a degree of emotion (but under control), and conscious intentions to communicate in a particular way. They are not as long lasting as a personality trait or as fleeting as a surge of emotion, and they are usually meant to be recognised, rather than welling up spontaneously.

There are lots of everyday terms that describe states that belong in that general category, but we are not giving examples because the point of the study is to see which of the terms people find it natural to use, and how well they agree which applies when.

How would you describe the stance that the target person is adopting? If you think there is more than one sensible answer, then feel free to give alternatives.

Clip: 1-007a Target person: Man (named Ron)

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 2-011b Target person: Man

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 3-11i Target person: Woman

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 4-017c Target person: Woman, long hair, main speaker

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 5-019b Target person: Woman, straight hair

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 6-025b Target person: Woman presenter

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			

2nd			
3rd			

Clip: 7-028 Target person: Woman, longer blonde hair

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 8-029b Target person: Female guest

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 9-030b Target person: Female guest

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 10-31i Target person: Woman

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious

			5=very clear
1st			
2nd			
3rd			

Clip: 11-033a Target person: Female guest

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 12-035a Target person: Female guest

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 13-51i Target person: White male

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 14-056c Target person: Woman who is visible

Choice	Short description	Clarification (if necessary)	How clear an example

number			is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 15-058b Target person: Woman with brown hair

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 16-63i Target person: Woman

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 17-075b Target person: Man at the end without glasses

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 18-084b Target person: Woman with glasses

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 19-096d Target person: Woman

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 20-106b Target person: Man with blue jacket

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			
3rd			

Clip: 21-106b Target person: Man

Choice number	Short description	Clarification (if necessary)	How clear an example is it? 1=very dubious 5=very clear
1st			
2nd			

3rd			